



**ENGINEERING OPERATIONS COMMITTEE MEETING  
MINUTES  
MARCH 3, 1994, 9:00 A.M.  
EXECUTIVE CONFERENCE ROOM**

Present:	R. A. Welke G. D. Taylor L. A. Kinney C. Roberts J. D. O'Doherty C. J. Arnold	G. D. Dobie R. E. Maki L. R. Brown P. F. Miller J. W. Reincke J. K. Erickson - FHWA
Guest:	M. R. Melchiori S. P. Mortel E. D. Winkler	C. T. Maki W. C. Turner

Minutes of February 3, 1994, meeting were approved as written.

**OLD BUSINESS**

**1. Root Study Report on Bituminous Mixtures and Paving - Ed Winkler**

Ed Winkler presented an overview of the Bituminous Advisory Committee involvement and a status report of activities leading to the Root Study Report on Mixtures and Paving. A steering committee was established and consists of MDOT and industry representatives. The steering committee played a major role in the sponsorship of an investigation of Bituminous Mixtures and Paving, and the formation of subcommittees focusing on four emphasis areas: 1) Quality Assurance (QA)/Quality Control (QC); 2) Mixtures; 3) Education (Training); and 4) Mix and Design Procedures. Dick Root of Chicago Testing Laboratory was engaged to perform the investigation and make recommendations. Similar studies were completed for Minnesota, Wisconsin and North Carolina. Concerns were expressed regarding the following: 1) An outline of specific tasks to be completed as part of the investigations was not defined, 2) Materials and Technology personnel were not interviewed during the study, and 3) preliminary findings suggest that MDOT change its practice for certifying engineering technicians.

It was agreed that the certification of technicians must be addressed with the construction industry. However, MDOT as owner of the state highway infrastructure must address all issues concerning specifications, certification, and all changes/revisions must be approved by the EOC.

**ACTION:** Ed Winkler will submit recommendations for revisions to EOC for final approval.

**NEW BUSINESS**

**1. Interstate Funds for I-275 CRC Reconstruction - Mark Melchiori/Tom Maki**

The Metro District completed a task force study of various rehabilitation and reconstruction options for the continuously reinforced concrete (CRC) pavements along the I-275 corridor located in Metro District and District 8.

The task force reached a consensus for recommendations and requests EOC consideration for approval of the following two projects for total reconstruction:

- A. South County Line to Sibley Road, 6.06 miles of six lanes at \$3.5M per mile equals approximately \$21.2M. Replace existing deteriorated CRC pavement with conventional concrete pavement (does not include ramp reconstruction).
- B. Sibley Road to Penn Central Railroad, 8.06 miles of six lanes at \$3.5M per mile equals approximately \$28.2M. Replace existing deteriorated CRC pavement with conventional concrete pavement (does not include ramp reconstruction).

NOTE: Above includes all projects in the Metro District built without transverse reinforcement.

**ACTION:** Mark Melchiori was requested to re-establish a task force with the charge to develop an overall strategy for treatment of the I-275 corridor. The proposed strategy must include rehabilitation and reconstruction options, short and long-term treatments, construction scheduling, and phasing. The proposal for FY 1995 should not exceed a budget of approximately \$25 million dollars. The task force will present their proposed strategy at the April 7, 1994, meeting.

2. **DRAFT Operating Instruction 3000.01, Guidelines for Engineering Operations Committee - R. A. Welke**

The DRAFT Operating Instruction 3000.01 was approved, with minor revisions to be incorporated.

**ACTION:** C. Roberts will incorporate revisions and prepare final document for distribution.

3. **Role and Responsibilities of the Bituminous Advisory Committee (DRAFT) - R. A. Welke**

Two draft proposals were discussed outlining the role and responsibilities of the Bituminous Advisory Committee and its relationship with the EOC.

**ACTION:** Ed Winkler will consolidate the two drafts for distribution to the district engineers for review. It will then be placed as an agenda item for discussion at a future Bureau District Engineer Meeting. The final draft must be consistent with the recently revised Operating Instruction 3000.01 for the EOC.

4. **Research Report R-1328, "Evaluation of the Delamination of the Polyurethane Topcoat", Research Project 92 TI-1630 - J. W. Reincke**

The report presents the investigation of topcoat delamination affecting ten bridges coated in 1991. The investigations did not find a satisfactory explanation why nine structures completed in September and October of 1991 developed the same failure. The conclusion reached by the investigators is that delamination is not widespread, and resulted from a unique set of conditions that existed in 1991. The report was approved with revisions

incorporated in the Action Plan and the second paragraph of the Executive Summary.

**ACTION:** Jon Reincke will incorporate comments, forward copies of report to industry, and prepare an article for the next MATES publication for dissemination to MDOT staff.

5. **Research Pre-Proposal From Michigan Technological University (MTU) - J. W. Reincke**

The pre-proposal entitled "Dynamic Modeling of Snowplow Equipped Trucks" was discussed as a candidate project for the Great Lakes Center for Truck and Transport Research at the University of Michigan. EOC members agreed that the subject is of great interest to the department.

**ACTION:** John O'Doherty will prepare a list of additional items that the department would like to include under this research project. He will then contact MTU to further discuss the development of an acceptable scope of work with specific focus on practical application to MDOT maintenance activities.

6. **Proposed Research Project, "Auto Blaster Robotic Paint Removal Systems" - J. W. Reincke**

The Auto Blaster is a new technology paint removal system that will speed up the bridge blast cleaning process and should reduce exposure time for workers and the public. The system, witnessed in a demonstration by Materials and Technology Research Laboratory staff, is in the final stages of development and evaluation. The project was approved requiring further clarification and resolution of concerns regarding product rights and cost-sharing options.

**ACTION:** Jon Reincke will coordinate a research project with Larry Brown, Grand Rapids District Engineer.

7. **Status Report on Raised Pavement Markers - J. D. O'Doherty**

The Maintenance Division acknowledges an equipment problem with the Monroe 2000 blades on roadways with and without RPMs. There is a vibration and blade damage problem with all Model 98 RPMs, regardless of the blade type. Maintenance will install a test section on M-43 west of Canal Road in Lansing early this spring. All RPM types will be evaluated for durability, retroreflectivity, and ride quality.

**ACTION:** John O'Doherty will keep the EOC informed of progress.

8. **Traffic Operations Research Center of Excellence at Michigan State University (MSU) - R. E. Maki**

At the May 14, 1993, EOC meeting, approval was granted for the establishment of the Traffic Operation Research Center of Excellence at MSU, and funding of \$250,000 per year for five years. Bob Maki asked for and received EOC confirmation of the authorized \$250,000 per year for five years for the subject research contingent on funding availability and need of research.

**ACTION:** Bob Maki will prepare a letter, for R. A. Welke's signature, to MSU acknowledging MDOT support for the Research Center of Excellence.

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Calvin Roberts, Secretary  
Engineering Operations Committee

cc: EOC Members  
District Engineers

G. H. Grove

G. J. McCarthy

L. K. Heinig

J. Murner

E. D. Winkler

D. L. Coleman

W. C. Turner

D. L. Smiley

L. W. Martin

N. J. Nyquist

R. W. Muller

R. E.

Nordlund

L. E. DeFrain

G. L. Mitchell

J. E. Norton

C. W. Whiteside

I. B. Patel

C. G. Cantrell

G. H. Gallup

A. G.

Ostensen

G. J. Bukoski

R. D. Till

J. Becsey